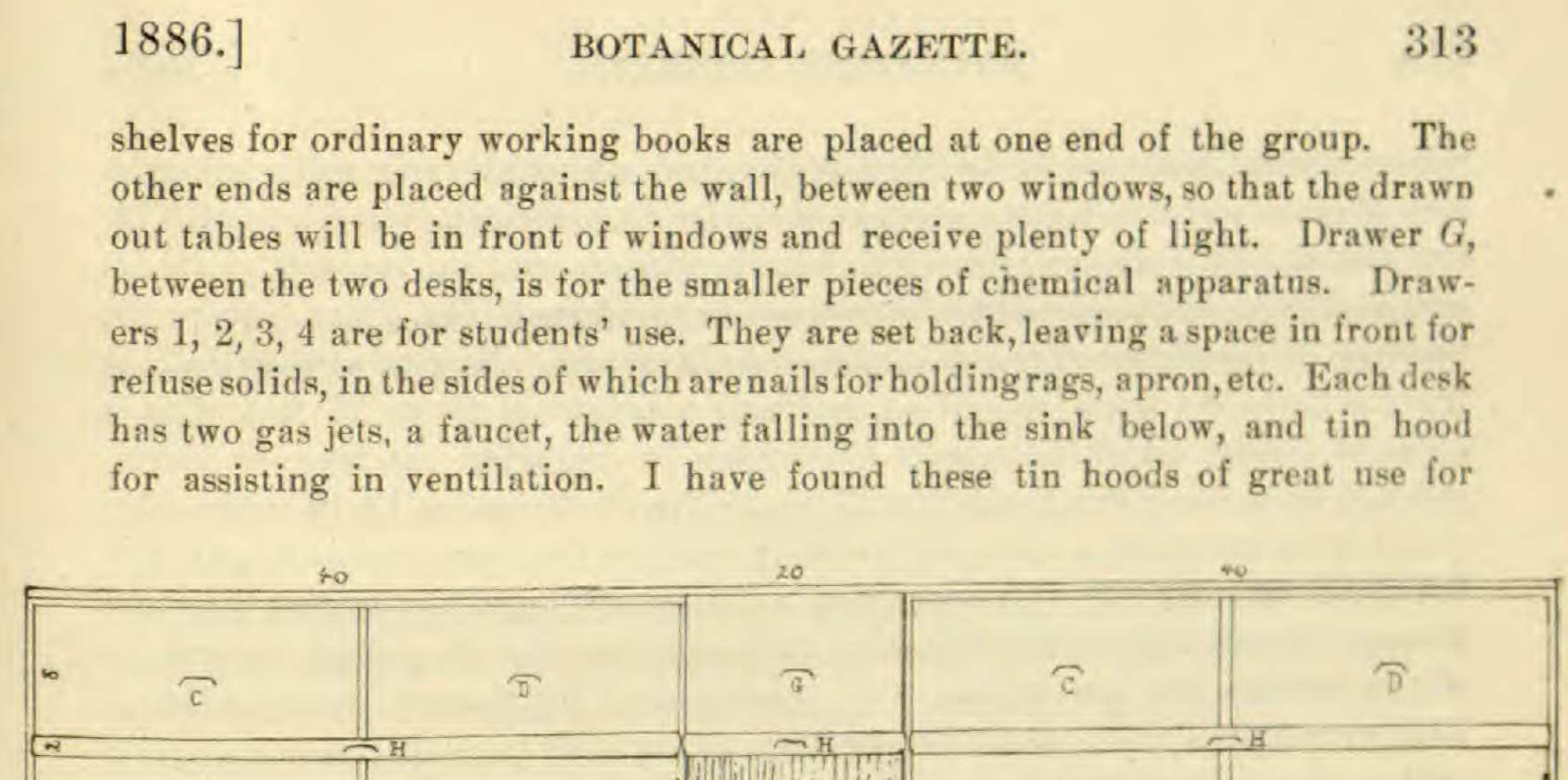
shelves for ordinary working books are placed at one end of the group. The other ends are placed against the wall, between two windows, so that the drawn out tables will be in front of windows and receive plenty of light. Drawer *G*, between the two desks, is for the smaller pieces of chemical apparatus. Drawers 1, 2, 3, 4 are for students' use. They are set back, leaving a space in front for refuse solids, in the sides of which are nails for holding rags, apron, etc. Each desk has two gas jets, a faucet, the water falling into the sink below, and tin hood for assisting in ventilation. I have found these tin hoods of great use for



PLAN OF LABORATORY DESK.

this purpose. I think that with these, and a gas chamber for generating hydrogen-sulphide, chlorine and one or two other gases, the microscope would not be injured by being kept in the laboratory if shut up in close box when not in use.

It is intended that one desk will be furnished with the reagents ordinarily employed in inorganic chemistry. The next with those of organic chemistry. Of these petroleum spirit, ether and absolute alcohol will constitute the chief expense. Petroleum spirit and ether can be readily recovered by using the condenser, so that absolute alcohol might be said to be the only great expense. Even if recovered it could only be employed as a weaker alcohol.

The individual desks are to be furnished only with the simpler pieces of apparatus as measuring flasks, pieces of platinum, porcelain crucible, etc., etc The balance, polariscope, spectroscope, condenser, platinum dish, etc., will be used in common. It is thought that the additional expense of carrying on the work as laid down will be slight in those places where botanical laboratories are properly equipped for the study of plant anatomy.—LILLIE J. MARTIN.

Some additions to the Sylva of North America.—During the month of April of this year I was able, in company with Messrs. C. G. Faxon and A. H. Curtiss, to make a somewhat detailed examination of the trees of the semi-tropical Florida region, among which should now be included:

Myginda integrifolia Lam. (M? latifolia Chapman, Flora, not Swartz), a

peculiar plant, not rare in the West Indies, and, although early collected upon Key West in a shrubby state, often confounded in American collections with M. latifolia and M. pallens; referred to Ilex by Kunth, and on account of its diœcious flowers and suspended ovules made by Grisebach (*Cat. Plant.* Cub. p. 15) the type of his section *Gyminda* of the genus Myginda. Myginda integrifolia is truly arborescent upon Key West, reaching a height of 20 to 25 feet, with a straight slender trunk, not rarely six inches in diameter. It may be distinguished from the other North American species of the genus by its entire obovate leaves, rounded or often deeply emarginate at the apex, revolute, pale yellow-green in color; its wide-spreading axillary and terminal cymes, diœcious flowers, the staminate with long erect filaments (those of M. pallens become reflexed between the petals upon the expansion of the flowers) surrounding a deeply-cleft pistillate process, the pistillate flower with two-lobed sessile stigmas with a single suspended anatropous ovule in each cell, and by its small dark blue or black ovoid drupe, the large embryo surrounded with a thin covering of albumen.

Terminalis Buceras Bentham & Hooker (Bucida Buceras L.). This well-known West Indian tree was first seen in the U. S. by Mr. Curtiss. It is common in the hummocks, near a Mr. Farley's house, towards the east end of Elliott's Key, where we found it in full bloom on the 19th of April. It is here a fine tree, sometimes 50 feet in height, with a trunk 12 to 18 inches in diameter, these tall, upright stems often springing from stout, short, prostrate trunks two to three feet in diameter. The wood is heavy, hard and moderately close-grained, but probably of little value except for fuel.

Pseudophœnix Sargentii H. Wendland (in lit.) Dr. Wendland proposes provisionally to establish a new genus in Chamedoriæ, to receive an arborescent Palm, also detected by us near the eastern end of Elliott's Key, with abruptly pinnate leaves four to five feet long, the pinnæ lanceolate acuminate 12 to 16 inches long, bright green above, glaucous beneath; branching interfoliaceus spadix 36 inches long by 30 inches wide, the main and secondary branches very light yellow-green, flattened and the latter thickened at the base, especially on the upper side, with an ear-shaped process, and with three-lobed three-seeded fruit or often one or two-lobed by abortion, one- half to three-fourths of an inch in diameter, in April bright orange or red, fleshy and very conspicuous. Unfortunately neither flowers nor mature fruit could be found, so that Dr. Wendland, to whom specimens were submitted, is unable to characterize the interesting addition to the North American sylva.

The Pseudophœnix is a tree with the general habit and appearance of Oreodoxa, 20 to 25 feet in height, with a trunk 10 to 12 inches in diameter. Six individuals only, in two localities, two or three miles apart, were found.

It is perhaps worthy of remark that upon the island of Key West, which is less than four miles long by about three-quarters of a mile wide, there are growing at the sea level 41 indigenous arborescent species, a greater number no doubt than can be found in any other area of similar extent in the United States. Lysiloma latisiliqua, Colubrina reclinata, now the rarest of the Florida trees, and Clusia flava, not rediscovered in Florida during the last 40 years, and

probably not now growing naturally in the United States, although found on Key West, according to Nuttall, in Dr. Blodgett's time, have now disappeared from the island; and it is not improbable that other species, which now flourish upon the adjacent islands, have been exterminated from Key West in the general cutting of the woods which is continually going on there.—C. S. SARGENT.

EDITORIAL.

IN REFERRING to the botanical papers at the recent Buffalo meeting of the American Association the *American Naturalist* takes occasion to remark that "it is noticeable that they include no physiological subjects, and that the tendency is strongly toward the systematic side of botany, which may be taken as indicating the prominent position which this phase of botanical science still maintains with the leaders." In regard to this conclusion we beg to differ, as not necessarily following from the fact stated, and as being contradicted by our own information. The GAZETTE has a wide acquaintance among our most active young botanists, and has had frequent consultations with them as to the most promising field for an energetic young worker to cultivate. A few years, often too few, perhaps, are spent in special and costly preparation of a general kind, and then every spirited student desires to enter some special line of work, in which he proposes to become an authority. The easiest advice to give is that he should follow the bent of his desires, but the average young botanist is compelled rather to follow the bent of his opportunities. Physiological botany is a great department, an exceedingly important and attractive one, and should be cultivated by all who can do so, and we know more than one keen American botanist who would willingly exchange all his chances in systematic work for a good opportunity to follow out his physiological bent. But the appliances for good physiological work are costly and entirely beyond the reach of the average American botanist. Of course any amount of physiological work can be conducted in ordinary laboratories, but such work is purely elementary and only serves for class illustration. What our young botanist wants is to become an authority in some department of physiological botany, and how is he to do it with the means at his command? Systematic botany, on the other hand, requires no such unattainable appliances, and what information is needed from unattainable books or specimens can be had by correspondence or an occasional visit to some herbarium where they are to be found. All that is necessary is the selection of some group that needs work (and there are plenty such), the accumulation of all books and specimens possible, and then a settling down to study. As being a thing that can be done, it naturally becomes the thing that is done. We must guard against a too hasty conclusion from these remarks that in our opinion most of our young systematists would be physiologists if they could. There are some among them who would be systematists from choice were the whole field of physiology open to them. We simply make the claim that our young botanists are fully alive to all the interests of their science, physiological as well as systematic, and were equal opportunities offered would be fairly distributed among the different departments.